

AQUATO® STABI-KOM

Fully Biological Wastewater
Treatment for New Construction
and Retrofitting

DECENTRALIZED WASTEWATER TREATMENT

RESPONSIBILITY FOR THE ENVIRONMENT

Although most households are connected to the sewage system, in rural areas this connection is often not possible and therefore your own responsibility as a landowner is required. The wastewater must be removed in such a way that the valuable groundwater is not endangered.

AQUATO® helps you with a small sewage treatment plant of the latest generation!

AQUATO® STABI-KOM

THE NEW GENERATION AMONG THE SMALL SEWAGE TREATMENT PLANTS!

AQUATO® has succeeded in what has been tried for a long time – the wastewater treatment plant almost without sludge removal – approved by DIBt, with outstanding cleaning performance.

Test plants under various conditions have proven over the years, STABI-KOM works „without ifs or buts“.



ADVANTAGES

- › No odours
- › No fouling processes
- › Long sludge removal interval
- › Prevents corrosion in concrete tanks
- › Significantly reduced operational costs

AQUATO® STABI-KOM & STABI-KOM-PAKT

SIMPLY BRILLIANT WITH MAXIMUM EFFICIENCY!

Single Stage Activated Sludge System after SSB® Process

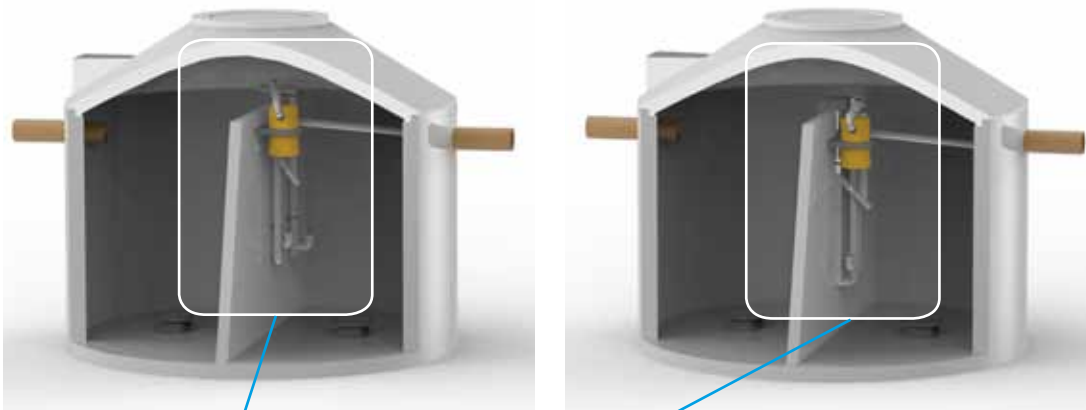
The AQUATO® STABI-KOM is a single stage activated sludge plant after the SSB®-process (sequential stabilizing activated sludge process – a sequential aerobic wastewater treatment plant with integrated sludge stabilization), developed by AQUATO® Umwelttechnologien GmbH.

In principle, both the cyclic wastewater treatment by sequencing batch process, as well as the separation of sludge, sludge stabilization and sludge storage are carried out in one common stage.

Here, the individual processes are not physically separated but in time (intermittent operation).

The common stage is divided into at least two chambers. Additionally to the function as primary settlement, the first chamber is also used for aeration.

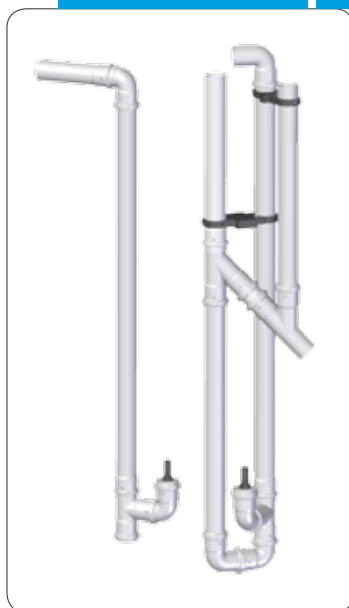
The last chamber is used for the intermittent oxygen input as well as secondary clarification.



STABI-KOM

or

STABI-KOM-PAKT

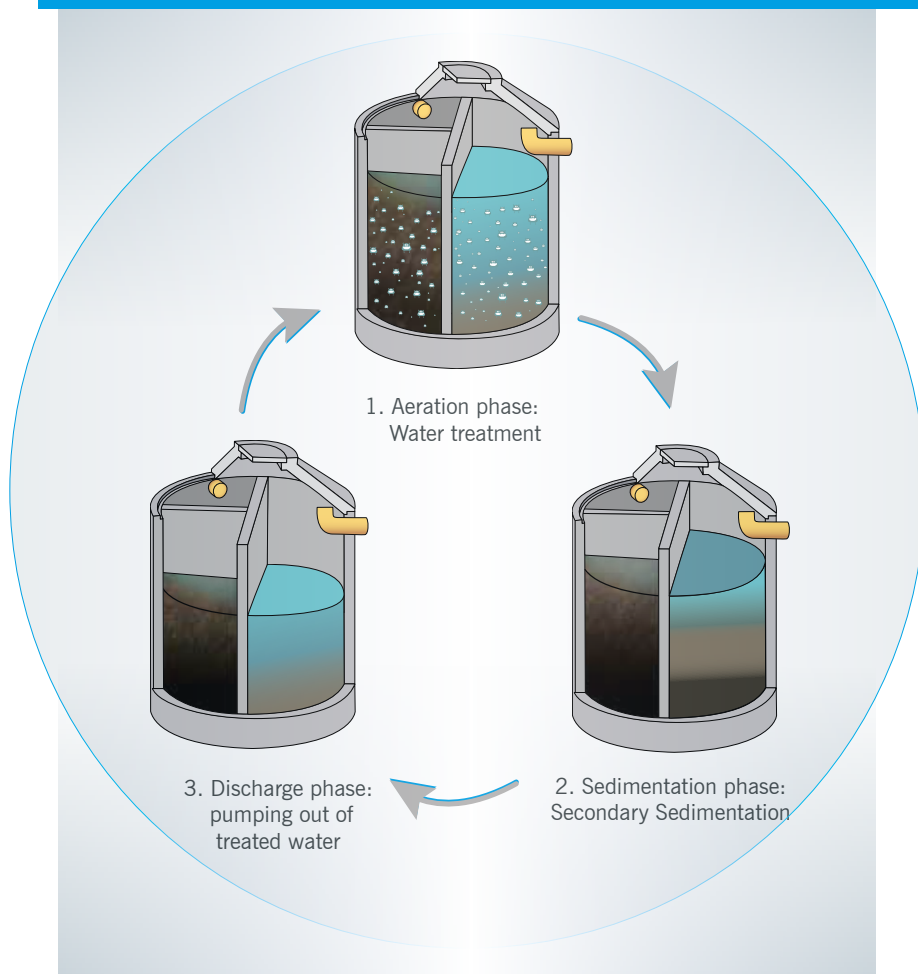


ADVANTAGES

- › Reduced technology - thus less susceptible
- › No electrical components in the water
- › High level of operational safety due to modern technology
- › Long-life cycle due to proven units
- › Simple and safe assembly and retrofit
- › Low maintenance costs due to easy handling
- › Low power consumption
- › Economy mode optional
- › Excellent discharge values at over- and underload

3-PHASES-CYCLE SSB®

These three phases of the SSB® process can be operated in modern single- or multi-chamber tanks or easily, without major structural changes, in existing older tanks.



All steps in the plant are carried out on a regular cycle, which is set by the control panel.

A cycle consists of the following phases:

Outstanding

cleaning performance:

- › COD: 95%
- › BOD₅: 99%
- › SS: 96%
- › NH₄-N: 98%
- › N_{tot,anorg}: 77%

1. Aeration phase: water treatment

The incoming sewage initially reaches the first chamber. Here the biological treatment of the wastewater starts. Organic compounds are removed by the active microorganisms in the activated sludge. Optionally, the process of denitrification takes place here. In addition, coarse material in the first chamber is retained.

2. Sedimentation Phase: Secondary Sedimentation

Biological treatment of the wastewater takes also place In the last chamber. At the same time this chamber takes also over the function of the final sedimentation by cyclic control of the system.

The activated sludge settles to the bottom of the aeration tank. In the upper area the clearwater supernatant is formed.

3. Discharge Phase: pumping out of treated wastewater

The treated wastewater from the clearwater supernatant is pumped into the outlet.

SLUDGE FORMATION AND SLUDGE STABILIZATION

Sludge Formation and Sludge Stabilization

Conditional on the process only aerobically stabilized sludge occurs in the small wastewater treatment plant AQUATO®STABI-KOM.

The system is designed so that besides the treatment of the wastewater also a sludge stabilization takes place by sufficient aeration. The sludge needs no further treatment.

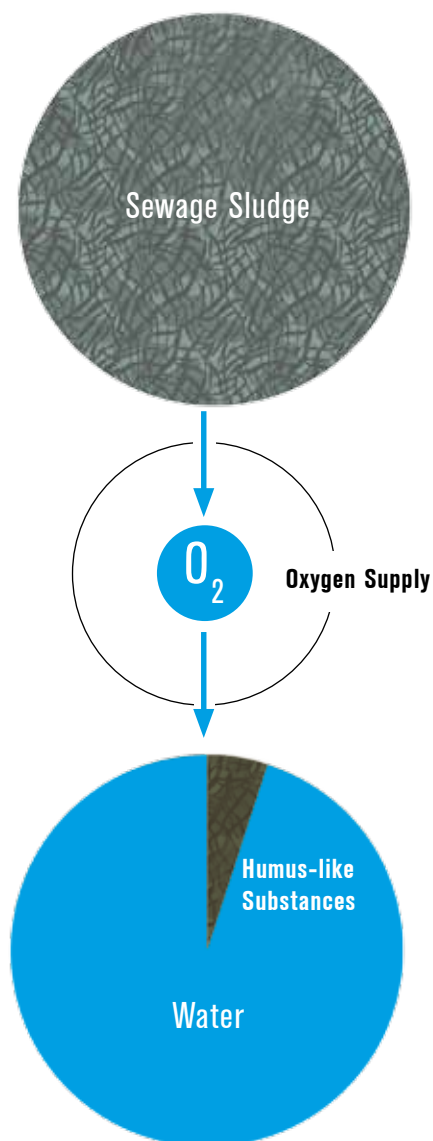
Normally sewage sludge consists of min. 95% water, in which there are solid and dissolved substances. This „muddy brew“ creates unpleasant odors by sludge decomposition.

By the supply of oxygen the described fouling processes does not happen. Instead, microorganisms are formed, which convert the sludge into humus-like substances and do not allow the unpleasant odors to evolve

Sludge disposal? What's that?

With sufficient tank size and simultaneous aerobic sludge stabilization a sludge balance turns out in the AQUATO® STABI-KOM wastewater treatment plant over the years, so that a sludge disposal could possibly be omitted completely.

This will save you a tremendous amount of money for years!



CONTROL AQUATO® K-PILOT



- Advanced control for smooth operation
- Graphical display
- Safe and easy to handle
- Compact construction due to integrated rotary valves with stepper technology
- As an alternative to clearwater siphon, a submersible pump can also be connected

Control K-Pilot

The modern control K-Pilot 18.1 / 18.3 with plain text display. So you have all the important data at a glance. To minimize the maintenance effort, a backpressure monitoring is integrated.

Standard equipment is the K-Pilot 18.1. For larger systems or special functions, the K-Pilot 18.3 with extended functionality is used. In this control, for example, there is the possibility to connect a clear water pump, whereby even larger delivery heights can be bridged.



Rotary Valve

Integrated rotary valve with stepper technology – energy saving and quiet



Wall Closets (optional)

Outdoor cabinet solution for housing the controller and compressor for wall mounting with built-in socket. The housing is made of glass fiber reinforced plastic (GRP).



Outdoor Cabinet (optional)

Outdoor cabinet solution for housing the controller and compressor. They provide cost effective and reliable protection for the components and are therefore used in many applications. The housing is made of PE or glass fiber reinforced plastic (GRP).

AQUATO® STABI-KOM SMALL SEWAGE TREATMENT PLANT...

... meets all legal requirements and standards, not only for Germany but for the entire EU region! The effluent quality must meet the high requirements - therefore the DIBt, the German Institute for Building Technology in Berlin, checks the status of our technology. The AQUATO®STABI-KOM DIBt wastewater treatment plant is approved.

Effluent Class C • Z-55.31-469 & Effluent Class D • Z-55.31-470

Effluent Class C • Z-55.31-489 & Effluent Class D • Z-55.31-488

Presented by:

